AMENDMENTS TO THE CLAIMS

(The following includes a complete listing of all claims with their current status indicated. Additional language is underscored; deletions are stricken through.)

1. (cancelled)

2. (currently amended) A method according to claim [[86]] 89, wherein the selection and degree of differentiation between the one or more characteristics of the two patterns is arranged such that areas where emboss points of the emboss pattern on the non-woven spunbonded polymer fabric are substantially in register with lamination points of the lamination pattern on the single lamination pattern calender roll are smaller than 25 mm^2 to avoid the occurrence of visible unlaminated patches in the form of blisters occurring in the resultant laminate.

3. (currently amended) A method according to claim [[86]] 89, wherein the selection and degree of differentiation between one or more characteristics of the two patterns is arranged to control the size of the areas in the resultant laminate containing groups of adjacent points in each of the emboss pattern on the non-woven spunbonded polymer fabric and point lamination pattern on the single lamination pattern calender roll and which are in registration, in order to avoid the visual appearance of unlaminated patches occurring in the resultant laminate.

4. (currently amended) A method according to claim [[86]] 89, wherein the emboss points of the emboss pattern on the non-woven spunbonded polymer fabric and the lamination points of the lamination pattern on the single lamination pattern calender roll each have a respective pitch therebetween and wherein the one or more selected characteristics of the two patterns include the pitch between the emboss points of the emboss pattern on the non-woven spunbonded polymer fabric or lamination points of the point lamination pattern on the single lamination pattern calender roll.

5. (previously presented) A method according to claim 4, wherein the pitch of the emboss pattern on the non-woven spunbonded polymer fabric is varied with respect to the pitch of the point lamination pattern on the single lamination pattern calender roll prior to lamination.

6. (currently amended) A method according to claim [[86]] 89, wherein the calender roll has a rotational axis, wherein the emboss points of the emboss pattern of the non-woven spunbonded polymer fabric and the lamination points of the lamination pattern each have respective axes of alignment extending at a respective angle to the rotational axis of the single lamination pattern calender roll and wherein the one or more selected characteristics of the two patterns include the axes of alignment of the emboss points of the emboss pattern and of the lamination points of the lamination pattern of the single lamination pattern calender roll.

7. (previously presented) A method according to claim 6, wherein the axes of alignment of the emboss points of the emboss pattern of the non-woven spunbonded polymer fabric and of the lamination points of the lamination pattern of the single lamination pattern calender roll are orthogonal to each other.

8. (previously presented) A method according to claim 6, wherein the axes of alignment of the emboss points of the emboss pattern of the non-woven spunbonded polymer fabric are varied with respect to the axes of the lamination points of the lamination pattern of the single lamination pattern calender roll prior to lamination.

9. (currently amended) A method according to claim [[86]] 89, wherein the one or more selected characteristics of the two patterns include one of the percentage bond area of the emboss pattern of the non-woven spunbonded polymer fabric and the percentage contact area of the point lamination pattern of the single lamination pattern calender roll.

10. (previously presented) A method according to claim 9, wherein the percentage bond area of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the percentage contact area of the point lamination pattern of the single lamination pattern calender roll prior to lamination.

11. (currently amended) A method according to claim [[86]] 89, wherein the one or more selected characteristics of the two patterns include one of the shape of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric and the shape of each lamination point of the point lamination pattern of the single lamination pattern calender roll.

12. (previously presented) A method according to claim 11, wherein the shape of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the shape of each lamination point of the lamination pattern of the single lamination pattern calender roll prior to lamination.

13. (currently amended) A method according to claim [[86]] 89, wherein the one or more selected characteristics include one of the size of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric and of the size of each lamination point of the point lamination pattern of the single lamination pattern calender roll.

14. (previously presented) A method according to claim 13, wherein the size of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the size of each lamination point of the lamination pattern on the single lamination pattern calender roll prior to lamination.

15. (cancelled)

16. (cancelled)

17. (currently amended) A method according to claim [[86]] 89, further comprising providing a thermoplastic adhesive layer between the nonwoven spunbonded polymer fabric and non-embossed polymer material during lamination.

18. (previously presented) A method according to claim 17, wherein the adhesive layer is provided as a coating on one of said nonwoven spunbonded polymer fabric and non-embossed polymer material.

19. (previously presented) A method according to claim 18, wherein the coating is substantially continuous but provides discrete adhesive bonding points between the nonwoven spunbonded polymer fabric and non-embossed polymer material at the lamination points during lamination.

20. (cancelled)

21. (previously presented) A method according to claim 19, wherein the nonwoven spunbonded polymer fabric is a thermoplastic polymer and wherein the single lamination pattern calender roll is a thermobonding calender.

22. (previously presented) A method according to claim 21, including passing the thermoplastic adhesive layer and the nonwoven spunbonded thermoplastic polymer fabric through the thermobonding calender such that they are caused to melt together to form an integrated bond.

23. (previously presented) A method according to claim 22, wherein the non-embossed polymer material is a thermoplastics polymer and is also caused to melt to form part of the integrated bond.

Claims 24-29 (cancelled)

30. (currently amended) A method according to claim [[84]] 89, wherein the spunbonded polymer fabric comprises a polymer selected from the group consisting of polypropylene, polyethylene, polyester and polyamide.

31. (currently amended) A method according to claim [[84]] 89, wherein the non-embossed polymer material comprises a thin film.

32. (previously presented) A method according to claim 31, wherein the thin film comprises a polymer selected from the group consisting of polypropylene, polyethylene, polyester and polyamide.

33. (currently amended) A method according to claim [[84]] 89, further comprising providing a further layer between the non-woven spunbonded polymer fabric and the non-embossed polymer material.

34. (previously presented) A method according to claim 33, wherein the further layer is one of a microfibre layer and a continuous thin film.

35. (currently amended) A method according to claim [[84]] 89, wherein the single lamination pattern calender roll has a rotational axis, wherein the nonwoven spunbonded polymer fabric has oppositely facing surfaces of which a first oppositely facing surface is presented to the single lamination calender roll and has an emboss pattern which is non-symmetrical about a line transverse to the rotational axis of the single lamination pattern calender roll, and wherein the nonwoven spunbonded polymer fabric is turned over prior to lamination to present to the single lamination calender roll a second alternative oppositely facing surface with an emboss pattern having different pattern characteristics to that presented when the nonwoven spunbonded polymer fabric is not turned over.

36. (cancelled)

37. (previously presented) A method according to claim 35, wherein the turned over embossed pattern of the nonwoven spunbonded polymer fabric is sufficiently different to the non-turned over embossed pattern to provide under the same lamination process conditions a different pressure distribution across the laminate.

38. (previously presented) A method according to claim 37, wherein the difference in pressure distributions leads to perforation of the laminate when the nonwoven spunbonded polymer fabric is turned over and non-perforation when it is not turned over.

39. (withdrawn) An apparatus for laminating a first material having an emboss pattern formed thereon, to a second material, the apparatus comprising a lamination means for bonding said first and second materials together at discreet points, wherein the lamination means provides a point lamination pattern having one or more of its characteristics selected to be different to a corresponding one or more characteristics of the emboss pattern so as to control, during lamination, the amount of point mis-registration between the two patterns.

40. (withdrawn) An apparatus according to claim 39, wherein the first and second materials are continuous sheets of material and the apparatus is arranged to form a continuous laminate.

41. (withdrawn) An apparatus according to claim 40, wherein the materials are arranged as wound rolls of material and the apparatus comprises means for unwinding and flattening the materials prior to lamination.

42. (withdrawn) An apparatus according to claim 39, wherein the lamination means comprises an embossed thermobonding calendar.

43. (withdrawn) An apparatus according to claim 39, wherein the apparatus further comprises means for cooling the laminate after the lamination process.

44. (withdrawn) An apparatus according to claim 39, wherein the apparatus further comprises means for treating the laminated material with a chemical composition after the lamination process.

45. (cancelled)

46. (withdrawn) A method of laminating a first polymer material to a second material by use of a thermoplastic adhesive layer, wherein the thermoplastic adhesive layer, the first polymer material layer and the second material layer are passed through a point lamination calendar and at least the adhesive and thermobonding layer are caused to melt together at the lamination points to form respective integrated bonds.

47. (withdrawn) A method according to claim 46, wherein the second material comprises a woven fabric textile material.

48. (withdrawn) A method according to claim 46, wherein the second material comprises a thermoplastics material and is also caused to melt to form part of the integrated bond.

49. (withdrawn) A method according to claim 46, further comprising selecting the lamination conditions to melt the thermoplastic adhesive layer in a single pass through the thermobonding calendar and subsequently to cool the laminate to set the melted adhesive.

50. (withdrawn) A method according to claim 46, further comprising applying the adhesive layer as a coating to one of the first or second materials.

51. (withdrawn) A method according to claim 50, wherein the applied coating is substantially continuous but provides discreet adhesive bonding points between the first and second materials at the lamination points during the point lamination process.

52. (withdrawn) A method according to claim 46, wherein the adhesive is one or more of an acrylic adhesive, a hot melt adhesive, a netting adhesive or a powder adhesive.

53. (withdrawn) A method according to claim 46, wherein the first and/or second materials comprise discontinuous fibres which are melted by the lamination process to form a film at the adhesive lamination points.

Claims 54 -56 (cancelled)

57. (currently amended) A method according to claim [[87]] 89, wherein the axes of alignment of the emboss points of the emboss pattern of the non-woven spunbonded polymer fabric and of the lamination points of the lamination pattern of the single lamination pattern calender roll are orthogonal to each other.

58. (currently amended) A method according to claim [[87]] 89, wherein the axes of alignment of the emboss points of the emboss pattern of the non-woven spunbonded polymer fabric are varied with respect to the axes of the lamination points of the lamination pattern of the single lamination pattern calender roll prior to lamination.

59. (currently amended) A method according to claim [[87]] 89, wherein the percentage bond area of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the percentage contact area of the point lamination pattern of the single lamination pattern calender roll prior to lamination.

60. (currently amended) A method according to claim [[87]] 89, wherein the shape of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the shape of each lamination point of the lamination pattern of the single lamination pattern calender roll prior to lamination.

61. (currently amended) A method according to claim [[87]] 89, wherein the size of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the size of each lamination point of the lamination pattern on the single lamination pattern calender roll prior to lamination.

62. (cancelled)

63. (currently amended) A method according to claim [[87]] 89, wherein the nonwoven spunbonded polymer fabric has oppositely facing surfaces of which a first oppositely facing surface is presented to the single lamination calender roll and has an emboss pattern which is non-symmetrical about a line transverse to the rotational axis of the single lamination pattern calender roll, and wherein the nonwoven spunbonded polymer fabric is turned over prior to lamination to present to the single lamination calender roll a second alternative oppositely facing surface with an emboss pattern having different characteristics to that presented when the nonwoven spunbonded polymer fabric is not turned over.

64. (previously presented) A method according to claim 63, wherein the turned over embossed pattern of the nonwoven spunbonded polymer fabric is sufficiently different to the non-turned over embossed pattern to provide under the same lamination process conditions a different pressure distribution across the laminate.

65. (previously presented) A method according to claim 64, wherein the difference in pressure distributions leads to perforation of the laminate when the nonwoven spunbonded polymer fabric is turned over and non-perforation when it is not turned over.

66. (withdrawn) A laminate including a first material having an emboss pattern formed thereon and a second material laminated to the first material using a point-lamination pattern in a lamination process, characterised in that the first material is a nonwoven spunbonded polymer fabric having a plurality of emboss points that are formed under heat and pressure and that form an emboss pattern, in that the second material is a non-embossed polymer material, in that the nonwoven spunbonded polymer fabric with the emboss pattern and the non-embossed polymer material are brought together and laminated to one another using a single lamination pattern calender roll of which the lamination pattern has a plurality of lamination points, and in that one or more characteristics of the two patterns is selected and differentiated in order to control, during lamination, the amount of point mis-registration between the emboss pattern on the nonwoven spunbonded polymer fabric with the lamination pattern on the single lamination pattern calender roll and thereby the occurrence of unlaminated patches in the resultant laminate.

67. (withdrawn) A laminate according to claim 66, wherein the selection and degree of differentiation between the one or more characteristics is arranged such that areas where emboss points of the emboss pattern on the non-woven spunbonded polymer fabric are substantially in register with lamination points of the lamination pattern on the single lamination pattern calender roll are smaller than 25 mm^2 to avoid the visual appearance of unlaminated patches including blistering occurring in the resultant laminate.

68. (withdrawn) A laminate according to claim 66, wherein the selection and degree of differentiation between one or more characteristics is arranged to control the size of the areas in the resultant laminate containing groups of adjacent points in each of the emboss pattern on the non-woven spunbonded polymer fabric and point lamination pattern on the single lamination pattern calender roll and which are in registration, in order to avoid the visual appearance of unlaminated patches occurring in the resultant laminate.

69. (withdrawn) A laminate according to claim 66, wherein the emboss points of the emboss pattern on the non-woven spunbonded polymer fabric and the lamination points of the lamination pattern on the single lamination pattern calender roll each have a respective pitch therebetween and wherein the one or more selected characteristics include the pitch between the emboss points of the emboss pattern on the non-woven spunbonded polymer fabric or lamination points of the point lamination pattern on the single lamination pattern calender roll.

70. (withdrawn) A laminate according to claim 69, wherein the pitch of the emboss pattern on the non-woven spunbonded polymer fabric is varied with respect to the pitch of the point lamination pattern on the single lamination pattern calender roll prior to lamination.

71. (withdrawn) A laminate according to claim 66, wherein the calender roll has a rotational axis, wherein the emboss points of the emboss pattern of the non-woven spunbonded polymer fabric and the lamination points of the lamination pattern each have respective axes of alignment extending at a respective angle to the rotational axis of the single lamination pattern calender roll and wherein the one or more selected characteristics include the axes of alignment of the emboss points of the emboss pattern and of the lamination points of the lamination pattern of the single lamination pattern calender roll.

72. (withdrawn) A laminate according to claim 71, wherein the axes of alignment of the emboss points of the emboss pattern of the non-woven spunbonded polymer fabric and of the lamination points of the lamination pattern of the single lamination pattern calender roll are orthogonal to each other.

73. (withdrawn) A laminate according to claim 71, wherein the axes of alignment of the emboss points of the emboss pattern of the non-woven spunbonded polymer fabric are varied with respect to the axes of the lamination points of the lamination pattern of the single lamination pattern calender roll prior to lamination.

74. (withdrawn) A laminate according to claim 66, wherein the one or more selected characteristics include one of the percentage bond area of the emboss pattern of the non-woven spunbonded polymer fabric and the percentage contact area of the point lamination pattern of the single lamination pattern calender roll.

75. (withdrawn) A laminate according to claim 74, wherein the percentage bond area of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the percentage contact area of the point lamination pattern of the single lamination pattern calender roll prior to lamination.

76. (withdrawn) A laminate according to claim 66, wherein the one or more selected characteristics include one of the shape of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric and the shape of each lamination point of the point lamination pattern of the single lamination pattern calender roll.

77. (withdrawn) A laminate according to claim 76, wherein the shape of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the shape of each lamination point of the lamination pattern of the single lamination pattern calender roll prior to lamination.

78. (withdrawn) A laminate according to claim 66, wherein the one or more selected characteristics include one of the size of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric and the size of each lamination point of the point lamination pattern of the single lamination pattern calender roll.

79. (withdrawn) A laminate according to claim 78, wherein the size of each emboss point of the emboss pattern of the non-woven spunbonded polymer fabric is varied with respect to the size of each lamination point of the lamination pattern on the single lamination pattern calender roll prior to lamination.

80. (withdrawn) A laminate according to claim 67, wherein the nonwoven spunbonded polymer fabric has a weight of greater than or equal to 50 g/m^2.

81. (withdrawn) A laminate according to claim 66, wherein the single lamination pattern calender roll has a rotational axis, wherein the nonwoven spunbonded polymer fabric has oppositely facing surfaces of which a first oppositely facing surface is presented to the single lamination calender roll and has an emboss pattern which is non-symmetrical about a line transverse to the rotational axis of the single lamination pattern calender roll, and wherein the nonwoven spunbonded polymer fabric is turned over prior to lamination to present to the single lamination calender roll a second alternative oppositely facing surface with an emboss pattern having different characteristics to that presented when the nonwoven spunbonded polymer fabric is not turned over.

82. (withdrawn) A laminate according to claim 81, wherein the turned over embossed pattern of the nonwoven spunbonded polymer fabric is sufficiently different to the non-turned over embossed pattern to provide under the same lamination process conditions a different pressure distribution across the laminate.

83. (withdrawn) A laminate according to claim 35, wherein the difference in pressure distributions leads to perforation of the laminate when the nonwoven spunbonded polymer fabric is turned over and non-perforation when it is not turned over.

Claims 84-88 (cancelled)

89. (currently amended) A method of laminating a first material having an emboss pattern formed thereon to a second material using a point-lamination pattern, said method ~~comprising~~ including,

providing a first material comprising a nonwoven spunbonded polymer fabric having a minimum weight of approximately 50g/m² and having a plurality of emboss points that are formed under heat and pressure and that form an emboss pattern having raised or depressed formations in the surface of the fabric, ~~and~~

providing a second material comprising a non-embossed polymer material,

the minimum weight of approximately 50g/m² of said nonwoven spunbonded polymer fabric and the emboss pattern having said raised or depressed formations in the surface of the fabric normally causing the occurrence of unlaminated patches in the form of blisters in areas of the resultant laminate where the emboss points of the emboss pattern and lamination points of the lamination pattern were in register with each other during lamination,

flattening and tensioning the first and second materials to reduce the tendency of the first and second materials to crease prior to feeding the first and second materials to a single lamination pattern calender roll of which the lamination pattern has a plurality of lamination points,

operating the single lamination pattern roll at a substantially constant speed of rotation,

feeding the flattened and tensioned first and second materials to the single lamination pattern calender roll rotating at a substantially constant speed whereby the first and second materials are in a substantially dimensionally stable condition at said single lamination pattern calender roll;

bringing the substantially dimensionally stable first and second materials together at said single lamination pattern calender roll, and laminating the substantially dimensionally stable nonwoven spunbonded polymer fabric first material with the emboss pattern and the non-embossed polymer substantially dimensionally stable second material to one another using the ~~a~~ single lamination pattern calender roll ~~of which the lamination pattern has a plurality of lamination points~~,

~~wherein the nonwoven spunbonded polymer fabric and the emboss pattern has a minimum weight of approximately 50g/m² that normally causes the occurrence of unlaminated patches in the form of blisters in areas of the resultant laminate where the emboss points of the emboss pattern and lamination points of the lamination pattern were in register with each other during the lamination process,~~

feeding the resultant laminate to a finishing core onto which the resultant laminate is wound;

operating the finishing core at a speed of rotation that matches the speed of rotation of said single lamination pattern calender roll;

making use of or controlling ~~and in that~~ interaction between the emboss pattern on the nonwoven spunbonded polymer fabric and the lamination pattern on the single lamination pattern calender roll ~~is made use of or controlled~~ by selecting and differentiating one or more characteristics of the two patterns whereby to control, during lamination, the amount of point mis-registration between the emboss pattern on the nonwoven spunbonded polymer fabric and the lamination pattern on the single lamination pattern calender roll ~~and thereby avoid~~, whereby

the resultant laminate has a laminated area in which the first and second materials each have substantially the same surface area and a visible interference pattern formed of visible emboss points of the emboss pattern and visible lamination points of the lamination pattern, and

the occurrence of visible unlaminated patches in the form of blisters in the resultant laminate is avoided.

90. (cancelled)